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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,726	03/01/2002	Takehiko Kinoshita	2271/66846	7474

7590

01/06/2004

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EXAMINER

LAMB, BRENDA A

ART UNIT	PAPER NUMBER
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1734

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DATE MAILED: 01/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,726

Applicant(s)

KINOSHITA ET AL

Examiner

Brenda A Lamb

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-11 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 and 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-7, drawn to method, classified in class 427, subclass 434.
 - II. Claims 8-11, drawn to apparatus, classified in class 118, subclass 64.
 - III. Claims 12-13, drawn to photoconductive element, classified in class 430, subclass 56.
 - IV. Claim 14, drawn to image forming method, classified in class 430, subclass 133.
 - V. Claim 15, drawn to image forming apparatus, classified in class 399, subclass 159.

Inventions (I;IV) and (II;V) are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process can be practiced with traditional dip coating apparatus or by hand or in image forming applications with a laminated product.

Inventions I and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the method of coating can be used to make a variety of conventional coated articles not related to photoconductive elements.

Inventions I and (IV; V) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions, the photo conductive member, can be made by lamination or used in an different image forming method and apparatus such as direct imaging with no transfer.

Inventions (II; V) and III are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the product as claimed can be made by a materially different apparatus such as lamination.

Inventions II and (IV; V) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions, the apparatus, can be used for coating bodies which are not related to image forming applications.

Inventions III and IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different

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process of using that product (MPEP § 806.05(h)). In the instant case the process for using the product as claimed can be practiced with another materially different product such as a conventional photo conductive element and the product as claimed can be used in a materially different process of using the product such as one using direct contact or one not using an intermediate transfer method imaging.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Richard Jaworski on May 1, 2003 a provisional election was made with traverse to prosecute the invention of Group II, claims 8-11. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-7 and 12-15 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 5-241355 in view of Japan 63-7873 and Furusawa et al.

Japan '873 teaches the design of a coating apparatus which is comprised of the following elements: a supporting device comprising a holder support movable in an up-and-down direction, a holder member affixed to the holder support for supporting a cylindrical body, the holder is open at a bottom for discharging vapor of a solvent; and a bath positioned below the supporting device and storing the coating liquid. Japan '873 teaches the flexible hood folds or contracts at the top of the bath and rises together with the cylindrical body and has a bottom positioned at a level below the level of bottom of the cylindrical body when the flexible hood is brought to a stop after a lift. Japan '873 fails to teach the supporting device supports a plurality of cylindrical bodies or the bath comprises a plurality of chambers each being positioned beneath one of the plurality of cylindrical bodies and each storing the coating liquid. However, Japan '355 teaches the design of a coating apparatus comprised of the following elements: a supporting

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device comprising a holder support movable in an up and-down direction, a plurality of holder members affixed to the holder support for supporting a plurality of cylindrical bodies; a bath positioned below the supporting device and storing the coating liquid, the bath comprises a plurality of chambers each positioned beneath one of the plurality of cylindrical bodies. Japan '355 fails to teach the supporting device includes a flexible hood, which surrounds the plurality of cylindrical bodies. However, Furusawa et al teaches a design of coating apparatus for dip coating to form a photosensitive layer on the outer peripheral surface of a cylindrical body in the manufacture of an electrophotographic photoreceptor. Furusawa et al teaches a common hood 8 which partially enclose the upper portion of the dip coating tank and surround the plurality of cylindrical members, which are to be dip coated.

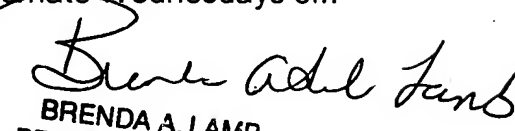
Therefore, it would have been obvious to modify the Japan '355 coating apparatus by affixing a flexible hood such as taught by Japan '873 to the holder support for the taught advantages of the flexible hood increase uniformity of the coating layer on the cylindrical body. Further, it would have been obvious given the modification of the Japan '355 coating apparatus with Japan '873 flexible hood to surround the cylindrical bodies with a common hood since Furusawa teaches using a common hood to surround the upper portion of a dip coating bath wherein a plurality of cylindrical bodies are capable of being simultaneously dip coated for the obvious cost advantages and reduction in complexity of the apparatus by using a common hood rather than a plurality of individual coating hood. With respect to claim 9, Japan '873 teaches compressed air feeding means for sending compressed air into the flexible hood. With respect to claim

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10, Japan '873 shows space between the bottom of the flexible hood and top of the bath is narrow when the hood is contracted. Although Japan '873 fails to teach the distance is within the scope of the claim, it would have been obvious to optimize in the Japan '873 apparatus the distance between the bottom of the flexible hood and top of the bath such that it is within the scope of the claim in order to minimize escape of solvent vapor during the immersion step. With respect to claim 11, the same rejection applied to claim 9 is applied here.

Any inquiry concerning this communication should be directed to Brenda A. Lamb at telephone number (571) 272-1231. The examiner can normally be reached on Monday through Tuesday and Thursday through Friday with alternate Wednesdays off.

B.A. Lamb/dh
December 29, 2003


BREND A. LAMB
PRIMARY EXAMINER